



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,189	03/30/2004	Minna Myllymaki	089229.00150	3342
32294 7590 06/14/2010 SQUIRE, SANDERS & DEMPSEY L.L.P. 8000 TOWERS CRESCENT DRIVE 14TH FLOOR VIENNA, VA 22182-6212				
EXAMINER HEIDER, SHANTELL LAKETA				
ART UNIT 2617		PAPER NUMBER		
NOTIFICATION DATE 06/14/2010		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

IPGENERALTYC@SSD.COM  
SWHITNEY@SSD.COM

### Office Action Summary

**Application No.**

10/812,189

**Applicant(s)**

MYLLYMAKI ET AL.

**Examiner**

SHANTELL HEIBER

**Art Unit**

2617

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 February 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-63 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-63 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/GS/US)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments filed 2/4/2010 have been fully considered but they are not persuasive.

Regarding Claims 1, 19, 32, 39 and 53: The applicant argues "*Salmivalli does not teach or suggest, at least, "providing the network entity with control information indicating at least one limitation on a plurality of simultaneous registrations, said control information indicating a restriction on a number of different contact addresses that can be simultaneously registered using a single public user identity," emphasis added, as recited in independent claim 1 and similarly recited in independent claims 19, 32, 39, and 53.*" See applicant's remarks, pages 15-20. The examiner respectfully disagrees.

Salmivalli discloses the number of subscribers registered in each visitor location register VLR is limited subscriber group specifically by an arrangement located in the specified VLR. A registration control unit 21 controls the registration process based on the subscriber registration quota for controlling subscriber registrations. See Col. 4, lines 34-64. The registration control unit of the VLR (i.e., network entity) is provided with the subscriber registration quota (i.e., control information) for controlling the registration process. Salmivalli further discloses the subscriber registration quota is presented by means of a maximum number (i.e., at least one limitation) of simultaneous subscriber registrations (i.e., plurality of simultaneous registrations). Each subscriber group is identified on the basis of the IMSI, where the IMSI consists of the MCC, MNC and NMSI, where the NMSI is the mobile subscriber identification number. See Col. 5,

lines 3-42. It is well known in the art for the NMSI to represent the phone number therefore, the NMSI is the contact address. According to Salmivalli, the subscriber registration quota (i.e., control information) indicates a restriction on the number of mobile subscribers that can be simultaneously registered by providing a maximum number (i.e., restriction). Where each mobile subscriber can be recognized by its MCC or MNC for its associated subscriber group and by the NMSI for it's, i.e., phone number or personal identification (i.e., contact addresses). Salmivalli further discloses subscriber groups may be formed on the basis of the IMSI country code MCC or the MNC information on the home PLMN. See Col. 6, lines 39-42. The subscriber group is identified by the MCC or MNC (i.e., single public user identity) for further determining the limitations set within the subscriber registration quota. Salmivalli discloses when the mobile station sends a location update request to the network, the subscriber group of the mobile station is identified on the basis of the IMSI sent in connection with the location updating request. See Col. 6, lines 11-15. Therefore, it is shown that the MCC or MNC represents a *single public user identity* such that each mobile station in a subscriber group can be identified by the shared MCC or MNC in which it is further determined the associated subscriber registration quota.

For the reasons as shown above, Salmivalli discloses "providing the network entity with control information indicating at least one limitation on a plurality of simultaneous registrations, said control information indicating a restriction on a number of different contact addresses that can be simultaneously registered using a single

public user identity," as required in independent claim 1 and similarly recited in independent claims 19, 32, 39, and 53.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-11 and 13-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Salmivalli, U.S. Patent No. 6,324,399 in view of Herrero et al. (Herrero), U.S. Publication No. 2005/0009520.

**Regarding Claims 1, 19, 32, 39 and 52**, Salmivalli discloses a method, comprising:

receiving at least one registration request (**i.e., location updating request**) to register a user (**i.e., MS**) requesting a service in a network entity (**i.e., VLR**) in a network subsystem of a communication system (**Col. 6, lines 7-15**);

providing the network entity with control information (**i.e., the subscriber group identified on the basis of the IMSI and subscriber registration quota**) indicating at least one limitation on a plurality of simultaneous registrations, said control information indicating a restriction on a number of different contact addresses (**i.e., NMSI derived from the IMSI**) that can be simultaneously registered using a single public user identity (**i.e., MCC or MNC derived from the IMSI**) (**Col. 5, lines 3-23 and Col. 6, lines 11-16**); and

controlling the registration based on the control information (**Col. 6, lines 18-23**).

Salmivalli fails to disclose an internet protocol multimedia core network subsystem.

In a similar field of endeavor, Herrero discloses a method and system for handling multiple registration. Herrero further discloses an internet protocol multimedia core network subsystem. **[0061]**

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teachings as described by Salmivalli with the teachings described by Herrero to arrive at the claimed invention for having multiple registrations active simultaneously where a user can receive calls in any of the registered terminals and further allowing delivery of internet multimedia services.

**Regarding Claim 2**, Salmivalli and Herrero disclose further comprising: determining that at least one user belongs to a same subscription (**i.e., subscriber group**). (**Salmivalli-Col. 2, lines 44-58**)

**Regarding Claims 3, 20, 33, 40 and 54**, Salmivalli and Herrero disclose further comprising: checking whether at least one of said at least one limitation on simultaneous registrations would be infringed by allowing the registration. (**Salmivalli-Col. 5, lines 34-42**)

**Regarding Claims 4 and 31**, Salmivalli and Herrero disclose further comprising: denying the registration when the checking shows that at least one of said at least one limitation regarding the simultaneous registrations would be infringed by allowing the registration. (**Salmivalli-Col. 5, lines 39-45**)

**Regarding Claims 5 and 31**, Salmivalli and Herrero disclose further comprising: allowing the registration request when the checking shows that none of the at least one limitation on simultaneous registrations would be infringed by allowing the registration.

**(Salmivalli-Col. 5, lines 46-52)**

**Regarding Claim 6**, Salmivalli and Herrero disclose further comprising: indicating with the control information a number (**i.e., maximum number**) of the simultaneous user registrations allowed for a subscription. **(Salmivalli-Col. 5, lines 16-23)**

**Regarding Claim 7**, Salmivalli and Herrero disclose further comprising: indicating with the control information a maximum number of the simultaneous user registrations allowed for a subscription. **(Salmivalli- Col. 5, lines 16-23)**

**Regarding Claim 8**, Salmivalli and Herrero disclose further comprising: indicating with the control information a limitation on a service type allowed for the simultaneous user registrations for a subscription. **(Salmivalli-Col. 2, lines 44-58)**

**Regarding Claims 9, 26 and 29**, Salmivalli and Herrero disclose further comprising: storing the control information in a user information storage entity. **(Salmivalli-Col. 4, lines 23-30)**

**Regarding Claims 10 and 27**, Salmivalli and Herrero disclose wherein said storing comprises storing the control information in a home subscriber server. **(Salmivalli-Col. 4, lines 23-30)**

**Regarding Claims 11 and 28**, Salmivalli and Herrero disclose wherein the checking comprises checking in a user information storage entity. **(Salmivalli-Figure 2)**

**Regarding Claim 13**, Salmivalli and Herrero disclose wherein the providing comprises providing the control information from the user information storage entity to said network entity. **(Salmivalli-Col. 4, lines 23-30)**

**Regarding Claims 14 and 21**, Salmivalli and Herrero disclose wherein the checking comprises checking in the network entity. **(Salmivalli-Figure 2)**

**Regarding Claim 15**, Salmivalli and Herrero disclose wherein said receiving comprises receiving the registration request in at least one of a serving controller and an interrogating controller. **(Herrero-[0078])**

**Regarding Claims 16, 23, 35 and 42**, Salmivalli and Herrero disclose wherein the receiving comprises receiving the registration request in the serving controller, and wherein the serving controller comprises a serving call session control function. **(Herrero-[0078] and [0079])**

**Regarding Claims 17, 24, 36 and 43**, Salmivalli and Herrero disclose wherein said receiving comprises receiving the registration request in the interrogating controller, and wherein the interrogating controller comprises an interrogating call session control function. **(Herrero-[0072] and [0078])**

**Regarding Claims 18, 37, 44 and 55**, Salmivalli and Herrero disclose further comprising: counting the simultaneous registrations of the contact addresses. **(Salmivalli-Col. 2, lines 44-58)**



**Regarding Claim 22**, Salmivalli and Herrero disclose wherein the network entity comprises at least one of a serving controller and an interrogating controller.

**(Herrero-[0075] and [0078])**

**Regarding Claim 25**, Salmivalli and Herrero disclose further comprising: a storing unit configured to store the control information associated with at least one of said at least one limitation regarding the simultaneous registrations of contact addresses. **(Salmivalli-Col. 4, lines 8-12)**

**Regarding Claim 30**, Salmivalli and Herrero disclose wherein a serving controller comprises the storing unit. **(Herrero-[0079])**

**Regarding Claims 34 and 41**, Salmivalli and Herrero disclose wherein the apparatus comprises at least one of serving controller means, interrogating controller means, or internet protocol multimedia core network subsystem means. **(Herrero-[0072], [0075], [0078] and [0079])**

**Regarding Claim 38**, Salmivalli and Herrero disclose further comprising: indicating with the control information at least one limitation on simultaneous registrations by the contact addresses in relation to one network. **(Salmivalli-Col. 4, lines 44-58 and Col. 5, lines 34-42)**

**Regarding Claims 45 and 56**, Salmivalli and Herrero disclose wherein contact information is assigned to the individual contact addresses to represent a network address of the corresponding user equipment used to register with the network entity. **(Salmivalli-Col. 5, lines 3-15)**

**Regarding Claims 46 and 57**, Salmivalli and Herrero disclose wherein a plurality of contact addresses are registered to access at least one service under a single subscription registered with the network entity. **(Salmivalli-Col. 6, lines 39-54)**

**Regarding Claims 47 and 58**, Salmivalli and Herrero disclose wherein a subscriber is registered with the network entity as being subscribed to a plurality of subscriptions for services. **(Salmivalli-Col. 6, lines 39-54)**

**Regarding Claims 48 and 59**, Salmivalli and Herrero disclose wherein at least one private user identity (i.e., **NMSI**) is registered with the network entity as representing a subscriber of a plurality of subscriptions for services. **(Salmivalli-Col. 6, lines 39-54)**

**Regarding Claims 49 and 60**, Salmivalli and Herrero disclose wherein a public user identity (i.e., **MCC or MNC**) is used to represent a plurality of private user identities. **(Salmivalli-Col. 6, lines 39-54)**

**Regarding Claims 50 and 61**, Salmivalli and Herrero disclose wherein a private user identity is used to represent a plurality of public user identities. **(Salmivalli-Col. 6, lines 39-54)**

**Regarding Claims 51 and 62**, Salmivalli and Herrero disclose wherein a single public user identity is used to represent a plurality of contact addresses operating a corresponding plurality of user equipments which are simultaneously registered with the network entity under a single subscription registered with the network entity as the single public user identity. **(Salmivalli-Col. 6, lines 39-54)**

**Regarding Claims 52 and 63**, Salmivalli and Herrero disclose wherein the registration is controlled based on contact information assigned to the individual contact addresses. **(Salmivalli-Col. 6, lines 7-20)**

4. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Salmivalli and Herrero in view of Sonti et al. (Sonti), U.S. Patent No. 6,108,540.

**Regarding Claim 12**, Salmivalli and Herrero disclose the method as described above.

Salmivalli and Herrero fails to disclose further comprising: sending a request for user subscriber information from said network entity to the user information storage entity.

In a similar field of endeavor, Sonti discloses a multi-profile subscriber. Sonti further discloses further comprising: sending a request for user subscriber information **(i.e., qualification request)** from said network entity **(i.e., MSC)** to the user information storage entity **(i.e., HLR) (Col. 7, lines 25-62)**.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teachings as described by Salmivalli and Herrero with the teachings described by Sonti to arrive at the claimed invention for allowing a subscriber to rapidly change the set of currently active features to another set of features where the subscriber can bypass the routine of having to contact an agent.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHANTELL HEIBER whose telephone number is (571)272-0886. The examiner can normally be reached on Monday-Friday 9:00am-5:30pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edouard Patrick can be reached on 571-272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Shantell Heiber/  
Examiner, Art Unit 2617  
May 12, 2010

/Patrick N. Edouard/  
Supervisory Patent Examiner, Art Unit 2617